

which is provided in applicants' disclosure of the invention, and under Section 103(a) as being rendered *prima facie* obvious by the teaching of *Schwalge et al.* (US 5,972,941) and *Kasahara et al.* (US 5,847,005).

With regard to the provisions of Section 112, ¶1, the Examiner contends that applicants' disclosure is insufficient to reasonably enable a person of ordinary skill in the art to make and/or use a mixture which contains

- a) a morpholine or piperidine compound I selected from the group of compounds Ia, Ib, Ic and Id defined in Claim 1, and
- b) a compound of formula II as defined in Claim 1,

in a synergistically effective amount. More particularly, the Examiner focuses in her argument on the representative examples provided by applicants and takes the position that the respective results are insufficient because

- synergistic effects are unpredictable;
- the representative examples concern mixtures of only one representative compound of formula II any only three of the four compounds I.

It is respectfully urged that the "predictability or lack thereof" in a particular art refers to the ability of one skilled in the art to extrapolate the disclosed or known results to the claimed invention. If one skilled in the art can readily anticipate the effect of a change within the subject matter to which the claimed invention pertains, then there is predictability in the art. The scope of the required enablement varies inversely with the degree of predictability involved, but even in unpredictable arts, a disclosure of every operable species is not required.

Applicants' agree with the Examiner's position that synergistic effects are in general unpredictable, cf. it cannot reasonably be predicted whether a combination of two known fungicides will provide for synergistic, antagonistic or merely additive fungicidal results unless additional information is available or is provided.

The additional information which a applicants' disclosure provides for a person of ordinary skill in the art includes

- 1) guidance as to which particular known fungicides have to be selected from the broad variety of known fungicides, namely a compound I and a compound II as defined in applicants' claims and further specified in the disclosure of the invention;
- 2) guidance as to the weight ratios in which the specifically selected compounds I and II are to be combined;
- 3) guidance as to the application rates in which the specifically selected compounds I and II are to be applied; and
- 4) a representative showing of synergistic effects.

It is known in the art that at least three of applicants four morpholine and piperidine compounds I exhibit equivalent properties in a synergistic combination with oxime ether carboxamides as addressed by the teaching of *Schwalge et al.* It is also well known in the art that applicants' four morpholine and piperidine compounds I are equivalent fungicides due to a similar mode of action. Based on the knowledge which is already available in the art and applicants' showing that three of the four morpholine and piperidine compounds I exhibit synergistic fungicidal properties when combined with a compound of formula II, a person of ordinary skill in the art can therefore reasonably expect that an equivalent synergistic fungicidal effect is found when the fourth of applicants' morpholine and piperidine compounds I is combined with a compound of formula II.

Moreover, the compounds which are encompassed by applicants' formula II are known to exhibit fungicidal effects and are structurally so closely related that a person of ordinary skill in the art can reasonably assume that the fungicidal properties of the respective compounds are due to a similar mode of action. Based on the knowledge which is already available in the art and applicants' showing that one representative of the compounds II exhibits synergistic fungicidal properties when combined with the compounds I, a person of ordinary skill in the art can therefore reasonably expect that an equivalent synergistic fungicidal effect is found when another representative of the compounds of formula II is combined with a compound I.

The Examiner's reasons for finding that applicants' disclosure of the invention defined in Claims 12 to 23 fails to meet the requirements of Section 112, ¶1, are therefore not deemed to be well taken. In light of the foregoing and the reasons already presented by applicants in the earlier proceedings it is therefore respectfully re-

quested that the rejection be withdrawn. Favorable action is solicited.

With regard to the rejection under Section 103(a) the Examiner takes the position that applicants' representative examples are not commensurate in scope with the claims.

It is respectfully urged that the nonobviousness of a broader claimed range can be supported by evidence based on unexpected results from testing a narrower range where one of ordinary skill in the art would reasonably extrapolate from the showing which is provided to the claimed range¹⁾. As discussed in the context of the Examiner's reasons for finding lack of enablement under Section Section 112, ¶1, a person of ordinary skill would reasonably extend the results achieved with three of applicants' four compounds I to the fourth compound I, and would also reasonably extend applicants' showing for one representative of the compounds of formula II to the other compounds encompassed by that formula. Accordingly, the Examiner's position that applicants' showing is not commensurate in scope with the claims is not deemed to be well taken. In light of the foregoing and the reasons already presented by applicants in the earlier proceedings it is therefore respectfully requested that the rejection be withdrawn. Favorable action is solicited.

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Respectfully submitted,

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1) For example, In re Chupp, 816 F.2d 643, 646, 2 USPQ2d 1437, 1439 (CAFC 1987); In re Clemens, 622 F.2d 1029, 1036, 206 USPQ 289, 296 (CCPA 1980).